

REMARKS

This request for continued examination is filed following the Office Action dated September 12, 2001, and the subsequent telephone conversation between the applicant's agent and Examiner Bayshore on January 18, 2002. In the Office Action, the Examiner has rejected claims 4-33 as being anticipated by Melnikoff (U.S. Patent No. 5,729,000), Edesess (U.S. Patent No. 5,884,287), and Garman (U.S. Patent No. 5,819,237).

In response, Applicant has cancelled claims 4-33 and have added new claims 34-54 to clarify the applicant's invention. A new set of claims is being submitted to replace old claims 4-33 for ease of amendment only, and not for the purpose of introducing new matter.

New claim 34 is identical to the claim discussed in the above-mentioned telephone conversation, which the Examiner indicated appeared to be patentable over the art cited in the outstanding office action (i.e. patentable pending a further search that may be performed at his discretion). It was noted that new claim 34 specifically requires that at least one rule be defined prior to executing a simulation, and that, at a plurality of time steps, the dynamic portfolio is changed by evaluating the at least one rule to produce a changed portfolio, wherein the changes are dependent on the value of at least one tracked attribute at the current time step, and wherein the dynamic portfolio becomes the changed portfolio after the changed portfolio is produced. Support for elements of new claim 34 can be found in old claims 1, 4-6 and 8, and throughout the specification (see e.g., p. 5, lines 11-20, p. 6, lines 2-25, and p. 10 line 14 to p. 11 line 30). New claims 35-40 are dependent on new claim 34. Support for elements of new claims 35-40 can be found in old claims 12-13 and 16-17, and in the specification (see p. 1, lines 22-24, p. 18 line 19 to p. 9 line 14, and p. 10 lines 1-13).

Similarly, new claim 41 specifically requires that at least one rule be defined prior to executing a simulation, and that, at a plurality of time steps, the dynamic portfolio is changed by evaluating the at least one rule to produce a changed portfolio, wherein the changes are dependent on the value of at least one tracked attribute at the current time step, and wherein the dynamic portfolio becomes the changed portfolio after the changed portfolio is produced. Support for elements of new claim 41 can be found in old claims 2, 18 and 19, and throughout the specification (see e.g., p. 5, lines 11-20, p. 6, lines 2-25, and p. 10 line 14 to p. 11 line 30). New claims 42-47 are dependent on new claim 34. Support for elements of new claims 42-47 can be found in old claims 12-13, 16-17, and 23-25, and in the specification (see p. 1, lines 22-24, p. 18 line 19 to p. 9 line 14, and p. 10 lines 1-13).

Similarly, new claim 48 specifically requires that at least one rule be defined prior to executing a simulation, and that, at a plurality of time steps, the dynamic portfolio is

changed by evaluating the at least one rule to produce a changed portfolio, wherein the changes are dependent on the value of at least one tracked attribute at the current time step, and wherein the dynamic portfolio becomes the changed portfolio after the changed portfolio is produced. Support for elements of new claim 48 can be found in old claims 3, 26 and 27, and through the specification see e.g., p. 5, lines 11-20, p. 6, lines 2-25, and p. 10 line 14 to p. 11 line 30). New claims 49-54 are dependent on new claim 48. Support for new claims 49-54 can be found in old claims 12-13, 16-17 and 31-33, and in the specification (see p. 1, lines 22-24, p. 18 line 19 to p. 9 line 14, and p. 10 lines 1-13).

Applicant respectfully traverses the Examiner's rejection of the claims and submits that the claims as amended define subject matter which is patentable over the cited art. No new matter has been introduced into the application by these amendments.


The Applicant requests confirmation that the amendments to the disclosure as made in the Applicant's previous response dated June 27, 2001 have been entered.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "**VERSION WITH MARKINGS TO SHOW CHANGES MADE**".

All objections and rejections have been addressed. It is respectfully submitted, therefore, that the present application is now in position for allowance, and a Notice to that effect is earnestly solicited.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Delete claims 4-33.

Insert new claims 34-54 as follows:

34. (new) A method of determining the risk associated with a user's portfolio by simulating changes to the composition of a dynamic portfolio under a plurality of scenarios at a plurality of time steps, the user's portfolio comprising a plurality of instruments, said method comprising the steps of

(a) generating a dynamic portfolio, said dynamic portfolio comprising a plurality of instruments and having an initial composition that is identical to the composition of the user's portfolio;

(b) defining at least one rule for use in a simulation in which changes are to be made to the composition of said dynamic portfolio, wherein said defining step is performed prior to executing said simulation, and wherein said at least one rule is dependent on at least one tracked attribute, on at least one tracking position, and on at least one trade position;

(c) selecting one of said plurality of scenarios under which said simulation is to be performed;

(d) executing said simulation under the scenario selected in step (c) at said plurality of time steps, wherein the current time step is initially the first time step of said plurality of time steps, and wherein the following substeps are performed on the dynamic portfolio generated at step (a):

i. valuing said dynamic portfolio at the current time step of said plurality of time steps, wherein a model for each instrument in said dynamic portfolio is evaluated;

ii. changing said dynamic portfolio by evaluating said at least one rule to produce a changed portfolio, wherein said changes are dependent on the value of said at least one tracked attribute at the current time step, and wherein said dynamic portfolio becomes said changed portfolio after said changed portfolio is produced;

iii. setting the current time step to the next time step of said plurality of time steps and repeating substeps (i) and (ii);

iv. repeating substep (iii) until said dynamic portfolio has been valued at all of said plurality of time steps;

(e) repeating steps (c) and (d) for each remaining scenario of said plurality of scenarios; and

(f) producing an output risk metric for said dynamic portfolio, wherein said output risk metric is dependent on the composition of said dynamic portfolio after step (d) is performed under at least one of said plurality of scenarios.

35. (new) The method as claimed in claim 34, wherein said at least one rule comprises a condition, and wherein said at least one rule is evaluated in substep (ii) of step (d) only when said condition is satisfied.

36. (new) The method as claimed in claim 35, wherein said at least one rule is selected from the following group: a band rule, a barrier rule, a comparison rule, a functional rule, and a composite rule.

37. (new) The method as claimed in claim 34, wherein each of said at least one rule is assigned a priority.

38. (new) The method as claimed in claim 37, wherein each of said at least one rule is evaluated in substep (ii) of step (d) in order of priority.

39. (new) The method as claimed in claim 34, wherein each of said plurality of instruments is one of the following: a financial instrument; a non-financial instrument.

40. (new) The method as claimed in claim 34, wherein a filter is used with at least one of said at least one rule.

41. (new) A dynamic portfolio of instruments for use with a risk management system in a simulation, the composition of said dynamic portfolio being changeable under a plurality of scenarios at a plurality of time steps, said dynamic portfolio comprising:

(a) a holding structure indicating instruments and their quantity in said dynamic portfolio; and

(b) a strategy structure indicating a trade manager in which at least one rule for a trading strategy is defined, wherein said at least one rule is dependent on at least one tracked attribute, on at least one tracking position, and on at least one

trade positions, wherein said at least one rule is defined prior to executing said simulation;

and wherein for each of said plurality of scenarios at each of said plurality of time steps, said at least one trade manager simulates changes to said dynamic portfolio by evaluating said at least one rule to produce a changed portfolio, wherein said changes are dependent on the value of said at least one tracked attribute at the current time step, wherein said dynamic portfolio becomes said changed portfolio after said changed portfolio is produced, and wherein said changes to said dynamic portfolio are reflected in said holding structure.

42. (new) The dynamic portfolio as claimed in claim 41, wherein said at least one rule comprises a condition, and wherein said at least one rule is evaluated only when said condition is satisfied.

43. (new) The dynamic portfolio as claimed in claim 42, wherein said at least one rule is selected from the following group: a band rule, a barrier rule, a comparison rule, a functional rule, and a composite rule.

44. (new) The dynamic portfolio as claimed in claim 41, wherein each of said at least one rule is assigned a priority.

45. (new) The dynamic portfolio as claimed in claim 44, wherein each of said at least one rule is evaluated in order of priority.

46. (new) The dynamic portfolio as claimed in claim 41, wherein each of said plurality of instruments is one of the following: a financial instrument; a non-financial instrument.

47. (new) The dynamic portfolio as claimed in claim 41, wherein a filter is used with at least one of said at least one rule.

48. (new) A risk management system operable on a plurality of instruments, said system comprising:

(a) at least one risk engine adapted to determine a risk value for each instrument of said plurality of instruments, said risk value determined by evaluating a model for said instrument under one of a plurality of scenarios;

(b) a database to store risk values of said plurality of instruments;

(c) a dynamic portfolio of instruments, the composition of said dynamic portfolio being changeable under said plurality of scenarios at a plurality of time steps,

said dynamic portfolio comprising a holding structure indicating instruments and their quantity in said dynamic portfolio and a strategy structure indicating a trade manager in which at least one rule for a trading strategy is defined, wherein said at least one rule is dependent on at least one tracked attribute, on at least one tracking position, and on at least one trade positions, wherein said at least one rule is defined prior to executing said simulation, wherein for each of said plurality of scenarios at each of said plurality of time steps, said at least one trade manager simulates changes to said dynamic portfolio by evaluating said at least one rule to produce a changed portfolio, wherein said changes are dependent on the value of said at least one tracked attribute at the current time step, wherein said dynamic portfolio becomes said changed portfolio after said changed portfolio is produced, and wherein said changes to said dynamic portfolio are reflected in said holding structure; and

(d) an aggregating engine adapted to retrieve said determined risk values to produce a risk metric corresponding to the composition of said dynamic portfolio under said plurality of scenarios.

49. (new) The system as claimed in claim 48, wherein said at least one rule comprises a condition, and wherein said at least one rule is evaluated only when said condition is satisfied.

50. (new) The system as claimed in claim 49, wherein said at least one rule is selected from the following group: a band rule, a barrier rule, a comparison rule, a functional rule, and a composite rule.

51. (new) The system as claimed in claim 48, wherein each of said at least one rule is assigned a priority.

52. (new) The system as claimed in claim 51, wherein each of said at least one rule is evaluated in order of priority.

53. (new) The system as claimed in claim 48, wherein each of said plurality of instruments is one of the following: a financial instrument; a non-financial instrument.

54. (new) The system as claimed in claim 48, wherein a filter is used with at least one of said at least one rule.